

## Technical System Documentation

### Technical and Standards Documentation Guideline

This section corresponds to the Support Manual. Support manual is delivered at the time of implementation of a system, and is directed towards management and maintenance staff.

#### Overview

Give a general description of the application: what it is, what are its main functions, who are its principal users, how it integrates into the overall computer and business environment.

#### Functions Summary

Give the overall structure of the system/application in terms of functional modules and the transfer of control and data between them.

#### Design Summary

List the design components and describe what each component does, where it is used, and how it is used.

#### Interfaces

List the related systems/applications and interfaces, and describe the nature of the relationships.

#### Production Environment

Describe the computer environment in which the system/application is to be installed and run.

#### Hardware

Describe the necessary hardware required for proper and successful installation.

#### Software

Describe the necessary software required for proper and successful installation.

#### Security and Data Integrity

Describe issues in security and data integrity.

#### Directories, Files, and Databases

Give a complete listing of directories, files and databases involved. Also, show their dependence on each other. Mention relationship of databases, etc.

#### Open Problems

List problems that are not solved at the time the system or application is released, describe their nature, and outline the planned actions.

#### Appendices

Include the following appendices.

Appendix A – Messages  
Appendix B – Logical Model  
Appendix C – Data Dictionary  
Appendix D – Log Files

## Glossary

This glossary contains entries for all terms used in the Support Manual.

## **Proposed Four Sections**

### **Overall Conceptual Design View**

This will be a very basic flowchart or block diagram. The illustration should consist of major components – servers, network, and software components. The flow of information might also be identified to provide a better understanding of the system. The intent is to provide a pictorial view and not a detailed technical view of the system. (An example is attached).

### **Program/Routine Names and Functions**

This section identifies each program or routine in the system. The header information on the page indicates basic information as to the system name, customer, specific computer hardware, specific operating system and specific computer language used. The sequential listing identifies each program/routine by its internal name. Each of these entries requires a short description as to each specific purpose. A sample entry might be as follows:

1	PR001	Adds, changes and deletes master payroll entries
2	PR002	Enter / edit timecard entries
3	PR003	Calculates gross earnings, taxes, deductions

A sample format is attached.

## File and Record Layouts

There are two types of entries required in this section that identify the data files and records associated with this system. Once again, the header information on the page indicates basic information as to the system name, customer, specific computer hardware, specific operating system and specific computer language used. The first section identifies the file/table in a simple listing format as illustrated:

1	empmaster	Employee master record
2	empwages	Employee earnings, deduction
2	timecard	Employee timecard detail

The second requirement provides more detail information with respect to each file/table record. Additional header information may be necessary to identify the database name, table number, description, record length, primary index and actual record/table name. Each data field is then identified in sequence with pertinent information. Based upon the data design system used, sufficient information may be generated from the system itself. The following example and attached form is presented for guidance.

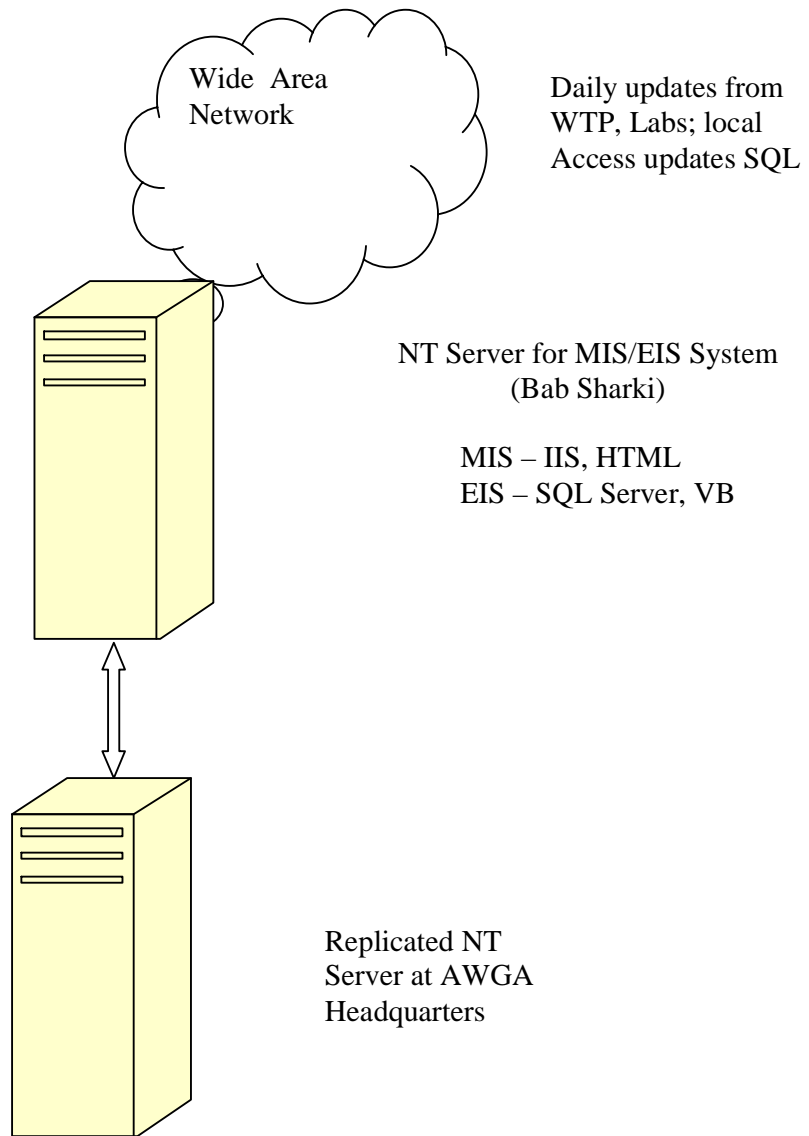
Database:	payroll						
Table:	empmaster						
1	empno	CHAR	6	6	Y	N	Employee Number
2	empname	CHAR	30	30	Y	N	Employee Name last, first
2	empdob	NUM	8	8	N	Y	Date of Birth CCYYMMDD

## Program / Routine and Data Relationship

This section of documentation connects the two previous sections. A relationship is established between the program/routine and the file(s) that are manipulated. A coding scheme has been established indicating the type of action – S-select, I-insert, U=update, D=delete. Once again, the header information on the page indicates basic information as to the system name, customer, specific computer hardware, specific operating system and specific computer language used. The following is a simple illustration and an attached form can be used.

		empmaster	empwages	timecard
1	PR001	SIUD		
2	PR002	S		IUD
3	PR003	S	IUD	S

## Overall Conceptual Design View (sample)



## Arab Soft Example

### Program names and functions (screens)

System, Customer, Computer, O.S., Language, Date, Author  
Serial, Program Name, Description

### Record Layouts

File List - System, Customer, Computer, O.S., Language, Date, Author  
Serial, Table Name, Description

Layout - System, Customer, Computer, O.S., Language, Date, Author  
Database, Table Name, Description, Key  
Serial, Name, Type, Length, Byte, Index, Null, Remarks

### System Flowcharts

Renew files  
Daily Jobs  
Reports  
Prepare Tables  
Maintenance  
Inquiry

### Program / Files relations

Serial, Program name, file/table, S=select, I=insert, U=update, D=delete

### Functional block diagram

Flowcharts based upon menu